



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

10/798,806

03/10/2004

David A. Johnson

J-MVHL.1001

7101

7590

11/02/2004

ROBERT D. VARITZ, P.C.
2007 S.E. Grant Street
Portland, OR 97201

EXAMINER

LIEU, JULIE BICHNGOC

ART UNIT

PAPER NUMBER

2636

DATE MAILED: 11/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/798,806

Applicant(s)

JOHNSON, DAVID A.

Examiner

Julie Lieu

Art Unit

2636

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

2. Claims 1-4, 6, 7, and 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson (US Patent No. 5,160,842) in view of Brogi et al. (US Patent No. 5,734,335).

Claim 1:

Johnson discloses an airborne method for mapping and remotely reporting thermal and critical alignment evaluation data regarding the perimeter of a ground fire comprising:

- a. From an airborne platform which is deployed above and in selectable visual proximity to at least a portion of the perimeter line of a ground fire, gathering, along a substantially common line of sight, for remote transmission, linked thermal and optical imagery data interpretable for picturing positionally-defined thermal information relating to a selected region on and along such a perimeter-line portion, (see abstract)
- b. Substantially simultaneously, and in relation to said gathering with respect to such

Art Unit: 2636

A selected region, additionally acquiring related critical-alignment, fire-information

Evaluation data including air temperature (see col. 2)

c. Transmitting such thermal, optical and critical-alignment evaluation data to, and for reception and interpretation at, a remote site

The reference fails to disclose using fire information evaluation data including relative humidity, wind speed and direction. Nevertheless, the use of such information as an aid in determining the anticipated path of the fire is old in the art as taught in Brogi. In light of this teaching, it would have been obvious to one skilled in the art to use the concept taught in Brogi in the system of Johnson's because it would provide useful information.

Though not clearly stated in the reference that the information is transmitted to the remote site, one skilled in the art would have readily recognized such feature is implicitly indicated in the reference because the information is use for the purpose of aiding the firefighter where best to allocate fire fighting sources (abstract). Further, such idea is well known in the art as taught on Brogi. Therefore, it would have been obvious to one skilled in the art to transmit the information to a remote site as implicitly suggested by Johnson and taught in Brogi for the purpose disclosed in Johnson.

Claim 2:

The method in Johnson further includes, with respect to such a selected perimeter-line region, noting, relative to the platform, the associated angular disposition in space of the associated substantially common line of sight along which such optical and thermal data for that region is gathered; that is, the system includes the latitude/longitude data. Col. 2 last paragraph.

Claim 3:

Art Unit: 2636

Johnson's method further comprises enabling said optical and thermal imagery data gathering to take place selectively along an infinitely different number of selectable, spatially-oriented, substantially common lines of sight.

Claim 4:

Johnson fails to disclose effectively linking, relative to a selected perimeter-line region, the linear distance along the associated, substantially common line of sight between the selected region and the airborne platform. Nonetheless, it would have been obvious to provide information such as distance because it further provides useful information.

Claim 6:

The rejection of claim 6 recites the rejection of claim 1, except it is an apparatus claim. It is inherent that the apparatus are included in the Johnson and Brogi system to perform the method disclosed.

Claim 7:

The support platform is an airborne platform (aircraft 14).

Claim 9:

The rejection of claim 9 recites the rejection of claim 2.

Claim 10:

The rejection of claim 6 recites the rejection of claim 1, except it is an apparatus claim. It is inherent that the apparatus are included in the Johnson and Brogi system to perform the method disclosed.

Claim 11:

Johnson discloses a method comprising:

Art Unit: 2636

- a. From an airborne platform, gathering, for visual presentation and viewing purposes, related optical and thermal fire-perimeter data, (see abstract)
- b. Also from an airborne platform, gathering critical-alignment evaluation data which is associated with and relevant to such optical and thermal data for map-display viewing and evaluation.

Though not clearly stated in the reference that the information is transmitted to the remote site, one skilled in the art would have readily recognized such feature is implicitly indicated in the reference because the information is use for the purpose of aiding the firefighter where best to allocate fire fighting sources (abstract). Further, such idea is well known in the art as taught on Brogi. Therefore, it would have been obvious to one skilled in the art to transmit the information to a remote site as implicitly suggested by Johnson and taught in Brogi for the purpose disclosed in Johnson.

Claim 12:

The references fails to clearly state applying to such gathered data selected critical-alignment, severity scale parameters which are employable generally to rank, from lower to higher, fire severity conditions in terms of prioritizing the deployment of fire-fighting resources, and from, and on the basis of, said applying, effectively map-highlighting, also for viewing and evaluation, selected parts of the gathered data which indicate certain higher-severity fire conditions. However, Johnson implicitly suggests doing so because the references discloses the use of the information is for the purpose of aiding firefighters in determining the best to allocate fire-fighting resources. Therefore, the reference infers that the priority ranking would be one of the desirable feature in the method disclosed in Johnson.

Art Unit: 2636

3. Claims 5 and 8 rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson (US Patent No. 5,160,842) in view of Brogi et al. (US Patent No. 5,734,335) and Wysocki et al. (US Patent No. 5,381,338).

Claim 5:

Johnson fails to include associating with such optical, thermal, and critical-alignment evaluation data, GPS information which is effective to define the then-associated positions in space, relative to one another, of the selected region and the airborne platform. However, the use of GPS to aid system users in determining the exact location of an event is also conventional in the art as taught in Wysocki. Therefore, it would have been obvious to one skilled in the art to use GPS in the combined system of Johnson and Brogi as taught in Wysocki because it would be very helpful in aiding firefighters to find the location of the fire.

Claim 8:

The rejection of claim 8 recites the rejection of claim 5, except it is an apparatus claim, which apparatus are included in the combined system.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julie Lieu whose telephone number is 571-272-2978. The examiner can normally be reached on Mon-Fri 9AM-6PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Hofsass can be reached on 571-272-2981. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2636

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Julie Lieu', is written over a faint, circular official stamp.

Julie Lieu
Primary Examiner
Art Unit 2636

Oct. 31, 04